



State of Utah

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Department of
Environmental Quality

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DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

M1035/0009
Leslie

AUG 28 2015

Steve Schnoor
Manager – Environment, Land and Energy
Kennecott Barneys Canyon Mining Company
P.O. Box 311
8200 South 9600 West
Bingham Canyon, Utah 84006-0311

Dear Mr. Schnoor:

Subject: **Construction Permit** for Construction of Barneys Canyon Mine Heap Leach Pad #5 Buttress

On March 20, 2015, the Division of Water Quality (DWQ) received the engineering plans and specifications for Construction of Barneys Canyon Mine Heap Leach Pad #5 Buttress prepared in part by Anderson Engineering Company Inc (Anderson). Although the drawings were prepared by Anderson the plans and specifications had not been stamped by a Utah registered Professional Engineer (PE) as required. On June 3, 2015, DWQ received the plans and specifications that had been stamped by a Utah registered PE. After review of those plans and specifications some clarifications were required which resulted in final set of specifications which were emailed to DWQ on August 19, 2015.

The following is a summary of the proposed major construction projects for this Construction Permit:

- Place clean structural fill as a wedge or buttress adjacent to the present Heap Leach Pad #5 and
- Extend the present 60 mil HDPE liner by cutting and then welding a new 60 mil HDPE liner and placing the new liner in an anchor trench.

In the future (after additional engineering has been completed) plans and specifications will be submitted for similar activities on Leach Pads 1 through 4. All Leach Pads will then be regraded and the slopes will be relaxed and will not exceed 2.5H:1V. All Leach Pads will then be covered with native soils, revegetated, and closed in place. This will minimize potential exposure of spent ore to the environment. New Construction Permit(s) will be issued for these activities at that time.

The plans and specifications, as submitted, comply with *the Utah Water Quality Rules, (R317, Utah Administrative Code)*. A **Construction Permit** is hereby issued as constituted by this letter, subject to the following conditions:

1. *Any revisions or modifications to the approved plans and specifications must be submitted to DWQ for review and approval, before construction or implementation thereof. Please submit any changes for review and approval directly to Woodrow Campbell, P.E., of the DWQ Ground Water Protection Section.*

195 North 1950 West • Salt Lake City, UT
Mailing Address: P.O. Box 144870 • Salt Lake City, UT 84114-4870
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2. *A written operations and maintenance manual, containing a description of the functioning of the facilities, an outline of routine maintenance procedures, and all checklists and maintenance logs needed for proper operation of the system, must be submitted and approved before the final inspection and operation of the system.*
3. *The approved facilities must not be placed in service unless DWQ has conducted a final inspection, reviewed and approved the As-Built Construction Certification Report, and provided written authorization to place the constructed facilities in service.*
4. *Construction activities that disturb one acre or more are required to obtain coverage under the Utah Pollutant Discharge Elimination System (UPDES) Storm Water General Permit for Construction Activities. The permit requires the development of a storm water pollution prevention plan (SWPPP) to be implemented and updated from the commencement of any soil disturbing activities at the site until final stabilization of the project. For more information, or to obtain permit coverage on-line, please go to:
<http://www.waterquality.utah.gov/UPDES/stormwater.Htm>*

The plans and specifications for this project have been stamped and signed by a Professional Engineer currently licensed to practice in the state of Utah. The construction design, inspection supervision, and written construction certification of all work associated with this Construction Permit must be performed by a Professional Engineer licensed to practice in the state of Utah.

This Construction Permit will expire one year from the date of its issuance, as evidenced by the date of this letter, unless substantial progress is made in constructing the approved facilities or the plans and specifications have been resubmitted and the construction permit is reissued. This permit does not relieve you, in any way, of your obligations to comply with other applicable local requirements.

Please contact Mr. Campbell at the beginning of construction to allow periodic inspections to be scheduled. Upon completion of the project, a final inspection and approval of the As-Built Construction Certification Report is required before the approval to operate the completed facilities can be issued. Please remain in contact with Mr. Campbell to schedule the final inspection. The Construction Certification Report with final as-built drawings must include test results for the following construction quality assurance and quality control (CQA/QC) elements:

Soil Placement

- Proctor Curves,
- Soil Classification,
- Field Compaction Testing, and
- Subgrade Acceptance Certification for Lined Areas.

Flexible Membrane Liner

- Panel Placement Log,
- Trial Seam Test Log,
- Seaming Record,
- Seam Test Record,
- Repair Log,
- As-Built Drawing,

Mr. Steve Schnoor

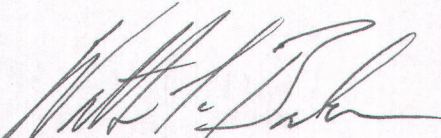
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- Manufactures Certification including QA/QC Testing of the Rolls, and
- Professional Engineer Certification.

If we can be of further assistance, please contact Mr. Woodrow Campbell at wwcampbell@utah.gov or (801) 536-4353.

Sincerely,



Walter L. Baker, P.E.
Director

WLB/WWC/DJH:jp

cc: Doug Bacon, DERR (via email, w/o encl.)
Leslie Heppler, UDOGM (via email, w/o encl.)
Kerri Fiedler, Region 8 USEPA (via email, w/o encl.)

DWQ-2015-009763